Neighborhood/Community Affairs Committee Meeting
February 19, 2013

Discussion Regarding An Update On Upper North Bay Road Drainage Project.
Commission Item C4G, January 16, 2013
(Requested by Commissioner Tobin)

Fred Beckman, Public Works Director

ITEM #5

MIAMIBEACH

COMMITTEE MEMORANDUM

TO: Neighborhood / Community Affairs Committee

FROM: Kathie G. Brooks, Interim City Manager

DATE: February 19, 2013

SUBJECT: **DISCUSSION REGARDING AN UPDATE ON UPPER NORTH BAY ROAD DRAINAGE PROJECT.**

Upper North Bay Road is a part of the La Gorce Neighborhood Improvements project. The 1997 Stormwater Management Master Plan (SWMMP) identified three (3) basins within the La Gorce neighborhood as priority basins. In May 2002, the design firm of Reynolds, Smith and Hills, Inc. (RS&H) submitted a Basis of Design Report (BODR) for the La Gorce neighborhood, as part of the CIP Office's Neighborhood Improvement Program, which included proposed improvements to these three basins. As RS&H began its design, it recognized the need to include two additional drainage areas on North Bay Road. Over the next several years, RS&H held community meetings and developed preliminary plans.

Stormwater Design

Per its 2010 Drainage Report, RS&H proposed to meet the required level of service by providing new inlets, pipes, drainage wells, control structures, and outfalls in gravity systems. The final design did not re-grade any streets and designed the stormwater system for a tailwater and groundwater elevation of -0.96 feet. (All elevations are NAVD88, which is a vertical control datum established in 1991.)

The 2012 SWMMP is more comprehensive than the 1997 SWMMP. It re-evaluated the functionality of each basin and took a more in-depth look at the drainage deficiencies Citywide. It also re-defined statistical rainfall data as well as impacts associated to sea level rise. By comparison with the RS&H Drainage Report, the groundwater and tailwater elevations pursuant to the 2012 SWMMP are 0.67 feet instead of the -0.96 feet originally assumed by RS&H, an increase of 1.67 feet above the original tailwater elevation. Further, it identified additional runoff from Alton Road into the Upper North Bay Road stormwater system, which was not accounted for in the earlier design, therefore increasing the originally assumed contributing watershed in certain sub-basins.

Following an in-depth analysis of the construction plans developed by RS&H, staff determined that the stormwater design will not address nor meet the level of service required by the 2012 SWMMP and cannot be easily modified to do so. As a result, staff conducted a full re-evaluation, as well as a conceptual re-analysis, of the stormwater improvements to ensure that the five-year level of service is met per the new criteria established in the 2012 SWMMP.

The size and elevations of the proposed outfall pipes need to be adjusted, as these outfalls

were originally designed with inverts below the current mud lines of the receiving water bodies. The elevations of the sidewalks also need to be reviewed as there are areas where the sidewalk is lower than the adjacent roadway elevation. These areas require re-grading of the sidewalk, harmonization of driveways, additional drainage, and/or a change to the roadway profile.

Further, a consultant was retained to evaluate the pavement condition of the roadway and to provide a recommendation to either mill and resurface or reconstruct various sections. The consultant based its recommendation on the Federal Highway Administration Highway Performance Monitoring System. This included a visual assessment of the crack severity, a determination of ride quality, and results from core samples.

Procurement

It is CIP staff's opinion that the most efficient delivery method for this neighborhood improvement project is via a design-build procurement scenario. Staff developed the design criteria package (DCP), which furnishes sufficient information to allow bidders to prepare a response to the City's request for qualifications. The DCP will specify performance based criteria for the project and the City Engineer, as the design criteria professional, will approve working drawings developed by the selected firm and will ensure statutory compliance pursuant to F.S. 287.055. The DCP is based upon the RS&H BODR, survey, watermain design, streetscape design, the current SWMMP, the City Public Works Manual, and the roadway assessment.

There will be an engineer of record, working for the design-build firm, who will complete the design and assume full responsibility as the engineer of record. The design-build firm will prepare signed and sealed contract documents for review by City staff to verify compliance with the intent of the DCP as well as statutory and regulatory requirements.

At this time, the City is developing the legal terms of the design-build agreement. Once completed and incorporated into the DCP, a final version will be available for a constructability review by the CIP Department.

At this time, it is proposed to initiate the design phase of the design-build contract during the fourth quarter of Fiscal Year 2012/2013 and to undertake the construction phase in Fiscal Year 2013/2014. The total project schedule is approximately 24 months.

Budget

A draft DCP was provided to the CIP Department for review. Further, the CIP Office retained a design firm and a cost estimating firm to prepare a probable cost of the design-build effort based upon one approach to the draft DCP. Public Works staff developed a second estimate based on an alternative approach to the DCP. Public Works and CIP staff met with the CIP retained design firm to discuss the different design approaches and cost estimates.

It was decided to proceed with the lower of the two estimates with the understanding that if additional funding is needed, it would be requested during the FY 2013/14 capital budget development process. Once the project is awarded to a design-build firm and the design is further developed, requests to address any funding shortfalls will be presented to the Commission for consideration.

La Gorce Budget	
Funding	$17,988,772
Spent To Date	$ (1,434,702)
Available Funding	$16,554,070

Improvements in Advance of the Neighborhood Project

Certain locations on Upper North Bay Road are subject to localized flooding at frequencies and durations that necessitate that they be addressed in advance of the La Gorce Neighborhood Improvements Project.

1. The City recently reached substantial completion on stormwater improvements between 51st Street and 52nd Street that were necessitated by localized flooding in the swale area in front of 5161 North Bay Road. Improvements included installation of stormwater piping with three new inlets connecting to an existing drainage system and outfall at 52nd Street. While undertaking these improvements, the City also completed the milling and resurfacing of roadway and installation of a new watermain. A backflow preventer will also be installed at the outfall as this area is also subject to tidal flooding due to its particularly low elevation. The cost for this project is $396,622 paid with $178,480 from the La Gorce Neighborhood Improvements budget for water system improvements and $218,142 from the Stormwater Hot Spots budget for stormwater system improvements.

2. The City is also working with FDOT to expedite the construction of drainage improvements along the 5900 block of North Bay Road. A portion of this block is extremely low and experiences tidal flooding during the spring and fall high tides. To resolve this issue, FDOT and the City need to reconstruct the outfalls at 59th Street, separate the two stormwater systems, and add backflow preventers. Staff from the CIP Office and the Public Works Department recently met with FDOT to discuss the design and the best procurement method to advance the construction. Pending successful negotiation of a JPA, construction is scheduled to begin in Fall 2013.

   The City estimates that funding in the amount of $1,530,000 is needed for the design and construction of the 59th Street improvements. The estimate of the required City contribution is $660,000, which is available from the Stormwater Hot Spots budget. FDOT will provide funding in the amount of $870,000 to the City for its share of the work.

3. At the intersection of North Bay Road and La Gorce Drive, improvements have been proposed due to observed flooding during high tide events. Improvements include the installation of a 15-inch in-line check valve. This work is estimated to cost approximately $25,000 with funding from the Stormwater Hot Spots budget.

4. A future capital project proposes automating these backflow preventers. It is proposed to use gate valves with SCADA (Supervisory Control and Data Acquisition) and telemetry systems, allowing for remote operation. As these valves would be open under normal conditions but closed during high tides, they would reduce head losses caused by check valves and increase the performance of the stormwater system. This work will be funded through a future capital project budget.

JGG/FHB/JJF/RWS

Neighborhood/Community Affairs Committee Meeting
February 19, 2013

Discussion Regarding Relocation Of The Maintenance Vehicles From The Sunset Harbor Neighborhood.
Commission Item, C4D, February 6, 2013
(Requested by Commissioner Exposito)

Fred Beckman, Public Works Director

ITEM #9

MIAMIBEACH

City of Miami Beach, 1700 Convention Center Drive, Miami Beach, Florida 33139, www.miamibeachfl.gov

COMMITTEE MEMORANDUM

TO: Neighborhood / Community Affairs Committee

FROM: Kathie G. Brooks, Interim City Manager

DATE: February 19, 2013

SUBJECT: **DISCUSSION REGARDING RELOCATION OF THE MAINTENANCE VEHICLES FROM THE SUNSET HARBOUR NEIGHBORHOOD**

ANALYSIS

The relocation of the Property Management Facility to a site outside of Flamingo Park has been a longstanding goal of both Flamingo neighborhood residents and the City. After completing an extensive evaluation, the Commission made the determination to relocate Property Management to the 24,000 square foot City-owned property located at 1833 Bay Road.

In January 1997, as part of the master plan for Fire Station #2, there was a study done by STA Architectural Group that looked at putting Property Management along with Public Works on-site. This included the shared site access drive with the high school and the construction of a multi-leveled employee parking structure. Their conclusion was that the most appropriate use for this site did not include the relocation of an additional department. Later that year in April, STA eliminated consideration to move Fleet Management and Sanitation to the site after concluding that the site will not support the programmatic requirements of those departments.

On December 10, 2008, Resolution No. 2008-26969 was adopted whereby the City entered into an agreement to purchase air rights to 1833 Bay Road and certain portions of land for the development of a parking garage and retail space. By entering this agreement, the City would be able to accomplish moving Property Management from Flamingo Park to 1833 Bay Road. Approximately 120 parking spaces in the newly constructed Sunset Harbour garage were identified specifically for such use by Property Management. The resolution also included direction to the administration "to initiate the relocation of the Property Management Facility from Flamingo Park to the City owned property located at 1833 Bay Road." This action was supported by letter from the Townhomes at Sunset Harbour Condominium Association.

On September 9, 2009, the Commission adopted the request by the administration to issue a request for qualifications (RFQ) for the design, bid, award, and construction administration services for the Property Management Facility Projectto be located at 1833 Bay Road.

The program requirements for the Property Management yard and facility are as follows:

Building Requirements:

- Administrative offices
- Workshops (A/C – Refrigeration, Electrical, Plumbing, Carpentry, Painting)
- Parts inventory warehouse
- Record storage
- Material storage
- Locker rooms / restrooms

Yard Requirements:

- Outside storage area for playground equipment and other large items
- Lay-down area for small construction activities
- Loading area
- Oversized vehicle parking

The parking needs of the Division will be addressed in the Sunset Harbor Garage, located across the Street at 1840 Bay Rd. The garage will provide approximately 104 parking spaces for Property Management Division vehicles with a clearance height below 7'-2". Oversized vehicles will be parked at the proposed Property Management Facility.

To date, $153,000 has been spent on architectural and engineering services with an additional $28,500 on pre-construction services. The documents are 90 percent complete and are ready to be submitted to the Building Department for review and permitting. Presently, value-engineering discussions are in progress. The current project construction budget is $3.6 million. The building method is Construction Manager at Risk (CMR). Once the Guaranteed Maximum Price (GMP) has been negotiated, the GMP will be taken to Commission for approval. Thereafter, once the Notice to Proceed is given, the construction is anticipated to take approximately one year.

The City has hired LIVS to perform architectural and engineering services associated with the conversion and renovation of the of the abandoned pump station located in the Public Works Operations yard as well as site utilization and drainage improvements. Public Works Yard aerial is attached. In discussions with the project architect, it is his opinion that a parking garage could upon further investigation, be constructed in the open area of the 4.2 acre site. However, a height variance would need to be granted as it is envisioned that the proposed building could require a height of approximately 60 feet which would include an elevated first floor to accommodate the oversized vehicles, three (3) floors with conventional vehicular parking, and an upper floor to accommodate for office space.

There are several other obstacles that must be taken into account to permit such construction. The 30 inch force main that traverses the site will need to be relocated. The foot print of the building would require removing the fence between Public Works Operations and the Fire Department and sharing the northern driveway to provide for a second means of ingress and or egress.

Construction of a garage of this type could potentially take several years to complete. The actual construction phase of the project may take up to two years at which time the majority of the yard will need to be fenced off to segregate the construction area. During that time, the approximately 125 trucks and equipment, as well as employee parking for the 118 employees, will need to be relocated. The warehouse and operations offices, including the control room will need to stay accessible and operational.

The Property Management Division will need to remain at its present location or find an alternative location would need to be identified until such time as the proposed garage is ready for occupancy. The anticipated date for the Flamingo Park Master Plan improvements to be completed is 2015.

CONCLUSION

The following is being provided for discussion by members of the Neighborhoods/Community Affairs committee.

Attachment: Public Works Yard aerial

MAS/FHB/JJF

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City of Miami Beach: Public Works Yard 2012